

Rodgers, Jr.  
10/611,497

**Amendments to the Claims:**

Please withdraw claims 1-12, 19, 20, 25, 30, and 36 from consideration.

This listing of claims will replace all prior versions, and listings, of claims in the above-captioned application:

**Listing of the Claims:**

1. (Withdrawn) An exercise apparatus for enabling reciprocating motion of the user's legs or feet while the user remains generally stationary, saidthe apparatus comprising:
  - a stationary frame;
  - a first longitudinal rail supported, at least partially, by saidthe frame;
  - a second longitudinal rail supported, at least partially, by saidthe frame and in generally parallel relation with saidthe first rail;
  - a first foot carriage assembly movably engageable along saidthe first rail and pivotally fixed to deflect angularly downward from an inactive position upon application of pressure thereon by a user;
  - a second foot carriage assembly movably engageable along saidthe second rail and pivotally fixed to deflect angularly downward from an inactive position upon application of pressure thereon by a-the user;
  - an inertia drive assembly disposed proximate saidthe first and second rails and drivable upon movable operation of at least one of saidthe first and second carriage assemblies, saidthe drive assembly including:
    - a first continuous belt rotatably engageable with saidthe first carriage assembly, saidthe first continuous belt being positioned relative to saidthe first carriage assembly

such that saidthe first continuous belt deflects downwardly upon engagement with saidthe first carriage assembly; and

a second continuous belt rotatably engageable with saidthe second carriage assembly, saidthe second continuous belt being positioned relative to saidthe first-second carriage assembly such that saidthe second continuous belt deflects downwardly upon engagement with saidthe second carriage assembly;

a first suspension system for supporting saidthe first belt; and

a second suspension system for supporting saidthe second belt;

wherein each of saidthe first and second suspension systems includes a resilient support assembly responsive to deflection of saidthe first and second belt upon frictional engagement between saidthe first or second belt and one of saidthe carriage assemblies.

2. (Withdrawn) The apparatus of claim 1, wherein each of saidthe resilient support assemblies is interconnected with saidthe first or second belt so as to add tension to saidthe belt upon frictional engagement between saidthe belt and one of saidthe carriage assemblies and such that the added tension increases as saidthe carriage assembly deflects further downwardly from saidthe inactive position.

3. (Withdrawn) The apparatus of claim 1, wherein each of saidthe resilient support assemblies includes a spring device interconnected with saidthe first or second belt such that saidthe spring device is resistant to deflection of saidthe belt and such that the resistance of saidthe spring device increases at a varying rate as saidthe carriage assembly deflects further downwardly from saidthe inactive position.

4. (Withdrawn) The apparatus of claim 3, wherein each of saidthe resilient support assemblies includes a movable pulley interconnected with saidthe spring device, such that saidthe spring

device is resistant to shifting of saidthe movable pulley, saidthe first or second belt being rotatably supported about saidthe movable pulley.

5. (Withdrawn) The apparatus of claim 4, wherein saidthe movable pulley is supported on an arm member pivotable about a pivot point and shiftable upon deflection of saidthe first or second belt, saidthe movable pulley being arcuately movable about saidthe pivot point upon loading of saidthe belt by one of saidthe carriage assemblies.

6. (Withdrawn) The apparatus of claim 3, wherein each of saidthe carriage assemblies includes a coupling member having an engagement surface for frictionally engaging one of saidthe belts, wherein each of saidthe carriage assemblies is releasably pivotable from saidthe inactive position relative to one of saidthe belts to a position wherein saidthe engagement surface frictionally engages saidthe belt and is movable therewith, wherein each of saidthe belts is adapted to bias saidthe carriage assembly toward saidthe disengaged position.

7. (Withdrawn) The apparatus of claim 6, further comprising a spring device interconnected with saidthe movable pulley and responsive to shifting of saidthe movable pulley, thereby biasing saidthe belt to urge saidthe carriage assembly toward saidthe disengaged position.

8. (Withdrawn) The apparatus of claim 7, wherein saidthe drive assembly and saidthe first or second carriage assembly are interconnected such that, as saidthe first or second carriage assembly initially advances rearwardly or forwardly, saidthe drive assembly accelerates saidthe first or second carriage assembly up to a predetermined velocity without the user having to exert additional force to accelerate saidthe carriage assembly.

9. (Withdrawn) The apparatus of claim 3, wherein each of saidthe first and second carriage assemblies is frictionally engageable with one of saidthe first and second belts to drive saidthe

belt in a first direction when saidthe first or second carriage assemblies is moved in saidthe first direction, and wherein saidthe first or second carriage assemblies is disengageable from a substantially frictionally engaged relation with saidthe belt to move in a second direction opposite saidthe first direction.

10. (Withdrawn) The apparatus of claim 9, wherein saidthe first and second carriage assemblies are interconnected by a common continuous belt such that saidthe first carriage assembly can be accelerated in saidthe second direction through movement of saidthe second belt by saidthe inertia drive assembly and saidthe second carriage assembly can be accelerated in saidthe second direction through movement of saidthe first belt by saidthe inertia drive assembly, wherein saidthe common continuous belt interconnects saidthe first carriage assembly and saidthe second carriage assembly such that when saidthe first carriage assembly is moved one direction, saidthe second carriage assembly is moved in an opposite direction.

11. (Withdrawn) The apparatus of claim 3, wherein saidthe inertia drive assembly includes a drive shaft and a first energy device rotatably coupled with saidthe drive shaft, saidthe inertia drive assembly being disposed proximate saidthe first and second rails and engageable with saidthe first and second carriage assemblies such that, as saidthe first or second carriage assembly initially advances from a point of change in direction along one of saidthe rails, saidthe first energy device can accelerate saidthe carriage assembly; and

a second energy device distinct from saidthe first energy device, saidthe second energy device being engageable with saidthe inertia drive assembly and adapted to transmit energy thereto.

12. (Withdrawn) The apparatus of claim 3, wherein saidthe carriage assemblies and saidthe suspension systems are positioned such that each saidthe carriage assembly is pivotable from saidthe inactive position to a second position whereat saidthe carriage assembly is disposed in a

generally horizontal orientation, saidthe increase in spring resistance being substantially more pronounced as saidthe carriage assembly moves closer to saidthe second position.

13. (Currently Amended) An exercise apparatus for enabling reciprocating motion of the user's legs or feet while the user remains generally stationary, saidthe apparatus comprising:

a stationary frame;

a first longitudinal rail supported, at least partially, by saidthe frame;

a second longitudinal rail supported, at least partially, by saidthe frame and in generally parallel relation with saidthe first rail;

a first foot carriage assembly movably engageable along saidthe first rail and pivotally fixed such that saidthe first foot carriage assembly deflects angularly downward through an angular path from an inactive position upon application of pressure thereon by a user;

a second foot carriage assembly movably engageable along saidthe second rail and pivotally fixed such that saidthe second foot carriage assembly deflects angularly downward through an angular path from an inactive position upon application of pressure thereon by a-the user;

an inertia device disposed proximate saidthe first and second rails and drivable upon movable operation of at least one of saidthe first and second carriage assemblies;

a first resilient support assembly positioned relative to saidthe first carriage assembly so as to be responsive to angular deflection of saidthe first carriage assembly by imparting a resistant force on saidthe first carriage assembly and against pressure applied thereon; and

a second resilient support assembly positioned relative to saidthe second carriage assembly so as to be responsive to angular deflection of saidthe second carriage assembly by imparting a resistant force on saidthe second carriage assembly and against pressure applied thereon, wherein each saidthe resilient support assembly is configured such that saidthe resistant force increases at a varying rate as saidthe first or second carriage assembly deflects through saidthe angular path.

14. (Currently Amended) The exercise apparatus of claim 13, wherein each saidthe resilient support assemblies-assembly includes a spring extendable upon angular deflection of saidthe first or second carriage assembly, to impart a resistant force thereon.
15. (Currently Amended) The exercise apparatus of claim 15, wherein saidthe spring is interconnected with saidthe carriage assembly such that saidthe spring extends at a generally increasing rate as saidthe carriage assembly deflects through saidthe angular path.
16. (Currently Amended) The apparatus of claim 15, wherein saidthe angular path of each saidthe carriage assemblies extends from saidthe inactive position to a position corresponding to a generally horizontal position of saidthe carriage assembly.
17. (Currently Amended) The apparatus of claim 16, wherein saidthe resilient support assembly is configured such that the resistant force imparted by saidthe spring is substantially increased as saidthe carriage assembly approaches saidthe generally horizontal position.
18. (Currently Amended) The apparatus of claim 15, wherein saidthe resilient support assembly includes a crank interconnecting saidthe spring with saidthe carriage assembly.
19. (Withdrawn) The exercise apparatus of claim 14, wherein each saidthe resilient support assembly includes a continuous belt rotatably engageable with saidthe first or second carriage assembly, saidthe continuous belt being positioned relative to saidthe first or second carriage assembly such that saidthe continuous belt deflects downwardly upon engagement with saidthe first or second carriage assembly; and  
wherein saidthe continuous belt is operatively positioned intermediate saidthe first or second carriage assembly and saidthe spring is interconnected with saidthe spring such that

downward deflection of saidthe continuous belt linearly extends saidthe spring at a rate that increases as saidthe first or second carriage assembly deflects through saidthe angular path.

20. (Withdrawn) The apparatus of claim 19, wherein each of saidthe resilient support assemblies includes a movable pulley rotatably supporting saidthe first or second continuous belt, saidthe movable pulley being supported on an arm member pivotable about a pivot point and shiftable upon deflection of saidthe first or second belt, such that saidthe movable pulley is arcuately movable about saidthe pivot point upon loading of saidthe belt by one of saidthe carriage assemblies, and wherein saidthe spring device is interconnected with saidthe movable pulley such that saidthe spring device is resistant to shifting of saidthe movable pulley.

21. (Currently Amended) The apparatus of claim 13, wherein each saidthe resilient support assembly includes an elastic band supportably engageable with saidthe first or second carriage assembly and stretchable upon angular deflection of saidthe first or second carriage assembly.

22. (Currently Amended) The apparatus of claim 21, wherein each saidthe resilient support assembly includes a cam surface positioned intermediate saidthe carriage assembly and saidthe elastic band, saidthe cam surface being engageable with saidthe elastic band upon deflection of saidthe first or second carriage assemblies.

23. (Currently Amended) The apparatus of claim 22, wherein each saidthe cam surface is shaped such that, as saidthe carriage assembly deflects through saidthe angular path, an area of engagement between saidthe cam surface and saidthe elastic band shifts saidthe elastic band imparts saidthe resistant force on saidthe carriage assembly at an increasing rate.

24. (Currently Amended) The apparatus of claim 13, wherein saidthe resilient support assembly is characterized by a non-linear spring constant.

25. (Withdrawn) The apparatus of claim 13, wherein each saidthe resilient support assembly is fixed to saidthe first or second longitudinal rail.

26. (Currently Amended) The apparatus of claim 13, wherein each saidthe resilient support assembly includes an elastic device and an intermediate deflection element operatively positioned intermediate saidthe elastic device and saidthe first or second carriage assembly such that saidthe intermediate element is directly engageable with saidthe first or second carriage assembly and movably responsive to angular deflection of saidthe first or second carriage assembly, and wherein saidthe elastic device is directly engageable with saidthe intermediate element such that movement of saidthe intermediate deflection element in response to angular deflection of saidthe first or second carriage assembly causes saidthe elastic device to stretch and impart a resistant force thereon.

27. (Currently Amended) The apparatus of claim 26, wherein saidthe intermediate deflection element is directly movably responsive to angular deflection of saidthe first or second carriage assembly, and saidthe elastic device is positioned relative to saidthe intermediate deflection element such that movement of saidthe intermediate deflection element stretches saidthe elastic device at a rate that increases as saidthe first or second carriage assembly moves through saidthe angular path.

28. (Currently Amended) The apparatus of claim 26, wherein saidthe intermediate deflection element is a crank attached to saidthe first or second carriage assembly, and saidthe elastic device is a linearly extendable spring attached to saidthe crank.

29. (Currently Amended) The apparatus of claim 26, wherein saidthe intermediate deflection element is a cam surface directly attached to saidthe first or second carriage assembly and saidthe elastic device includes an elastic band supportably engageable with saidthe cam surface.

30. (Withdrawn) The apparatus of claim 26, wherein saidthe intermediate deflection element includes a continuous belt supportably engageable with saidthe carriage assembly and a moveable pulley shiftable upon deflection of saidthe continuous belt, and wherein saidthe elastic device includes a linearly extendable spring interconnected with saidthe moveable pulley.

31. (Currently Amended) An exercise apparatus for enabling reciprocating motion of the user's legs or feet while the user remains generally stationary, saidthe apparatus comprising:

- a stationary frame;
- a first longitudinal rail supported, at least partially, by saidthe frame;
- a second longitudinal rail supported, at least partially, by saidthe frame and in generally parallel relation with saidthe first rail;
- a first foot carriage assembly movably engageable along saidthe first rail and pivotally fixed to deflect angularly downward from an inactive position through an angular path upon application of pressure thereon by a user;
- a second foot carriage assembly movably engageable along saidthe second rail and pivotally fixed to deflect angularly downward from an inactive position through an angular path upon application of pressure thereon by athe user;
- an inertia device disposed proximate saidthe first and second rails and drivable upon movable operation of at least one of saidthe first and second carriage assemblies; and
- a first resilient support assembly positioned relative to saidthe first carriage assembly such that a resistant force is imparted on saidthe first carriage assembly in response to angular deflection thereof; and

a second resilient support assembly positioned relative to saidthe second carriage assembly such that a resistant force is imparted on saidthe second carriage assembly in response to angular deflection thereof; and

wherein each saidthe resilient support assembly is configured such that saidthe resistant force increases at a non-linear rate as saidthe first or second carriage assembly deflects through saidthe angular path.

32. (Currently Amended) The apparatus of claim 31, wherein each saidthe resilient support assembly includes an elastic device and an intermediate deflection element operatively positioned intermediate saidthe elastic device and saidthe first or second carriage assembly such that saidthe intermediate deflection element is directly engageable with saidthe first or second carriage assembly and movably responsive to angular deflection of saidthe first or second carriage assembly, and wherein saidthe elastic device is directly engageable with saidthe intermediate element such that movement of saidthe intermediate deflection element in response to angular deflection of saidthe first or second carriage assembly causes saidthe elastic device to stretch and impart a resistant force thereon.

33. (Currently Amended) The apparatus of claim 32, wherein saidthe intermediate deflection element is directly movably responsive to angular deflection of saidthe first or second carriage assembly, and saidthe elastic device is positioned relative to saidthe intermediate deflection element such that movement of saidthe intermediate deflection element stretches saidthe elastic device at a rate that increases as saidthe first or second carriage assembly moves through saidthe angular path.

34. (Currently Amended) The apparatus of claim 32, wherein saidthe intermediate deflection element includes a linkage assembly pivotally attached with saidthe first or second carriage

assembly, and saidthe elastic device is a linearly extendable spring connected with saidthe linkage assembly.

35. (Currently Amended) The apparatus of claim 32, wherein saidthe intermediate deflection element is a cam surface directly attached to saidthe first or second carriage assembly, and saidthe elastic device includes an elastic band supportably engageable with saidthe cam surface.

36. (Withdrawn) The apparatus of claim 32, wherein saidthe intermediate deflection element includes a continuous belt supportably engageable with saidthe carriage assembly and a movable pulley shiftable upon deflection of saidthe continuous belt, and wherein saidthe elastic device includes a spring interconnected with saidthe movable pulley such that saidthe spring is linearly extendable in response to shifting of saidthe movable pulley.

37. (Currently Amended) The exercise apparatus of claim 32, wherein saidthe elastic device includes a spring extendable upon angular deflection of saidthe first or second carriage assembly, saidthe spring being interconnected with saidthe intermediate deflection element and saidthe carriage assembly such that saidthe spring extends at a generally increasing rate as saidthe carriage assembly deflects through saidthe angular path.

38. (Currently Amended) The apparatus of claim 37, wherein saidthe angular path of each saidthe carriage assembly extends from saidthe inactive position to a position corresponding to a generally horizontal position of saidthe carriage assembly.